

Notice of Allowability

Application No.

10/565,590

Examiner

Jennifer Doan

Applicant(s)

MINZIONI ET AL.

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed on 8/6/07.
2. ☒ The allowed claim(s) is/are 23-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____

Jennifer Doan

JENNIFER DOAN
PRIMARY EXAMINER

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on August 6, 2007 has been fully considered and entered.

Reasons for Allowance

2. Claims 23-44 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to disclose or reasonably suggest all the limitations recited in claim 23. Specifically, the prior art of record fails to disclose an optical communication line comprising a first optical connection with accumulated chromatic dispersion at least partially compensated and including a first optical waveguide portion directly connectable to an output of a first processing station of electromagnetic radiation at a pre-established wavelength; and a second optical waveguide portion coupled to the first portion; an amplifying station provided with a first input directly connected to the second portion in order to receive a first output for amplified radiation; a second optical connection with at least partially compensated accumulated dispersion and including a third optical waveguide portion directly connected to the first output; a fourth optical waveguide portion coupled to the third portion and directly connectable to a second input of a second processing station, the first and third portions being associated to respective first order chromatic dispersions having opposite signs, at least

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the first and third portions being associated to respective first order chromatic dispersions in combination with the other limitations of claim 23.

Claims 24-41 depend from claim 23.

The prior art of record also fails to disclose or reasonably suggest all the limitations recited in claim 42. Specifically, the prior art of record fails to disclose a method for manufacturing an optical line for a communication system, comprising the following steps providing a first processing station provided with an output for electromagnetic radiation having a pre-established wavelength; connecting a first input of an amplifying station to the first station to receive radiation, the amplifying station being provided with a first output for amplified radiation; placing a first optical connection including at least a first portion of optical waveguide directly connected to the output and a second portion of optical waveguide directly connected to the first input, the first connection having at least partially compensated accumulated chromatic dispersion; placing a second optical connection having at least partially compensated accumulated chromatic dispersion and including a third portion of optical waveguide directly connected to the first output and a fourth portion of optical waveguide directly connectable to a second processing station; and choosing the first and third portions in such a way that they are associated to respective first order chromatic dispersions of opposite signs in combination with the other limitations of claim 42.

The prior art of record also fails to disclose or reasonably suggest all the limitations recited in claim 43. Specifically, the prior art of record fails to disclose a method for limiting the non linear effects in an optical communication system, comprising the following steps supplying a first optical connection including at least a first portion of optical waveguide coupled to a second portion of optical waveguide, the first connection having at least partially compensated accumulated chromatic dispersion; introducing electromagnetic radiation having a first wavelength in the first portion of optical waveguide; amplifying the radiation leaving the second portion; propagating the amplified radiation in a second optical connection having at least partially compensated accumulated chromatic dispersion and including a third portion of optical waveguide coupled to a fourth portion of optical waveguide, the first and third portions being associated to respective first order chromatic dispersions of opposite signs in combination with the other limitations of claim 43.

The prior art of record also fails to disclose or reasonably suggest all the limitations recited in claim 44. Specifically, the prior art of record fails to disclose a communication system comprising a first processing station provided with an output for electromagnetic radiation having a pre-established wavelength; an amplifying station provided with a first input connected to the first station to receive the radiation and with a first output for amplified radiation; a first optical connection having at least partially compensated accumulated chromatic dispersion and including at least a first portion of optical waveguide directly connected to the output and a second portion of optical

waveguide directly connected to the first input; a second optical connection having at least partially compensated accumulated chromatic dispersion and including at least a third portion of optical waveguide directly connected to the first output and a fourth portion of optical waveguide directly connectable to a second processing station, the first and third portions being associated to respective first order chromatic dispersions of opposite signs in combination with the other limitations of claim 44.

The examiner agrees with applicants' arguments on pages 2-9 in the remarks and fully concurs that Turitsyn et al. do not disclose or suggest a method and an apparatus of an optical communication line system with all limitations as defined above.

Claims 23-44 are therefore allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

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5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JENNIFER DOAN
PRIMARY EXAMINER